

REMARKS

Claims 1, 2, 4-7 and 8 are pending. By this amendment, claim 1 is amended. No new matter has been added.

Support for the amendment to claim 1 is found, for example, in paragraph [0037] of the specification, and Fig. 2.

Applicants thank Examiner Duong for the courtesies extended to Applicants' representative during the December 18, 2003 personal interview. The points discussed are incorporated into the remarks below and constitute the Applicants' record of the interview.

Applicants respectfully request due consideration of the references submitted with the October 14, 2003 and November 13, 2003 filed Information Disclosure Statements. The Examiner is requested to promptly notify the Applicants if those Information Disclosure Statements are not in the file.

Reconsideration is respectfully requested.

I. Claims Define Allowable Subject Matter

The Office Action rejects claims 1 and 2 under 35 U.S.C. §103(a) over U.S. Patent No. 6,141,074 to Bos in view of U.S. Patent No. 6,313,898 to Numano; claim 6 under 35 U.S.C. §103(a) over the combination of Bos in view of Numano and further in view of U.S. Patent No. 5,092,664 to Miyatake; and claims 4, 5, 7 and 8 under 35 U.S.C. §103(a) over Bos in view of Numano in further view of U.S. Patent No. 6,339,459 to Ichikawa.

Applicants respectfully submit that none of the applied references disclose that in a liquid crystal device, if a thickness of the liquid crystal disposed between the first and second substrates is represented as d , and a space defined between the pixel electrodes is represented as L , a ratio d/L is at least 1 and display defects caused by disclination is prevented by the same alignment film that is formed in spaces between body portions of the pixel electrodes, as recited in claim 1.

For example, Bos discloses that vacuum oblique evaporation technique is used to form a first layer of silicon oxide on the first substrate 14 at an evaporation angle of preferably 85° from the normal to the substrate 14. Further, Bos discloses that the second substrate 16 is prepared in the same manner (col. 8, lines 14-26). Further, Bos discloses that its four domain tilted homeotropic display is superior to homogeneously aligned four domain displays because disclinations or defect lines due to reverse twists are not present, domain boundaries are well defined, and are very stable in any voltage applied across the display (col. 5, lines 15-23). However, there is no disclosure or suggestion in Bos, as acknowledged in the Office Action of a relationship between a thickness of the liquid crystal and a space between the pixel and electrodes, and that the display defects caused by disclination is prevented by the same alignment film that is formed in spaces between body portions of the pixel electrodes.

Numano also fails to disclose the feature that is lacking in Bos because Numano discloses a third alignment film that is formed about the intermediate region between the adjacent pixel electrodes whereby a mutually different distortion is given to the liquid crystal molecules, in addition to a first and second alignment film (abstract). That is, Numano discloses in figures 1 and 2, intermediate alignment films (third alignment films) 13a and 19a (col. 7, lines 25-26). In various passages of Numano, it is disclosed that the third alignment film is different from the other alignment films or the other regions of the alignment film (col. 7, lines 50-54, col. 9, lines 1-9). Therefore, there is no disclosure or suggestion in Numano that the display defects caused by disclination is prevented by the same alignment film that is formed in spaces between body portions of the pixel electrodes.

Miyatake and Ichikawa also fail to disclose or suggest the above feature of claim 1.

Therefore, as the applied references fails to disclose each and every feature of claim 1, claim 1 is patentable over the applied references. Claims 2, 4-7 and 8, which depend from

claim 1, are likewise patentable over the applied references for at least the reasons discussed above and for the additional features they recite. Withdrawal of all the rejections is respectfully requested.

II. Conclusion

For the reasons stated above, Applicants submit that this application is in condition for allowance. Favorable reconsideration and prompt allowance are respectfully requested.

Should the Examiner believe that anything further would be desirable in order to place this application in better condition for allowance, the Examiner is invited to contact the undersigned at the telephone number listed below.

Respectfully submitted,



James A. Oliff
Registration No. 27,075

Seth S. Kim
Registration No. 54,577

JAO:SSK/jcp

Date: January 6, 2004

OLIFF & BERRIDGE, PLC
P.O. Box 19928
Alexandria, Virginia 22320
Telephone: (703) 836-6400

DEPOSIT ACCOUNT USE AUTHORIZATION Please grant any extension necessary for entry; Charge any fee due to our Deposit Account No. 15-0461
--